

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte DONALD WILDING

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Appeal No. 2004-0202  
Application No. 09/719,014

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ON BRIEF

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Before GARRIS, WALTZ and TIMM, Administrative Patent Judges.  
WALTZ, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on an appeal from the primary examiner's final rejection of claims 11 through 15, which are the only claims remaining in this application. We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellant, the invention is directed to an improved wheel suitable for use as an escalator wheel or on elevator doors, where the wheel comprises a first portion

containing a ball or roller bearing having an inner and outer portion which can rotate relative to each other and a second portion formed from a metallic material comprising a rim (Brief, page 2). The outer surface of the outer portion of the first portion has at least one recess while the surface of the second portion is deformed, such that the resulting deformation(s) protrude(s) into the recess(es) on the outer surface of the first portion to secure the second portion to the first portion (*id.*). A copy of illustrative independent claim 11 is attached as an Appendix to this decision.

The claims on appeal stand rejected under 35 U.S.C. § 103(a) as unpatentable over appellant's Figures 1-4 (admitted prior art) in view of Sutowski, U.S. Patent No. 2,935,357, issued May 3, 1960 (Answer, page 3, referring to the rejection as set forth in the final Office action dated July 23, 2002, Paper No. 15). We reverse the sole rejection on appeal essentially for the reasons stated in the Brief and those reasons set forth below.

#### **OPINION**

In the Answer, the examiner refers to the rejection as "set forth in prior Office Action, Paper No. 15." Answer, page 3. In the final rejection in Paper No. 15, the examiner concludes that

it would have been obvious that "the outer portion of bearings 80 in applicant's prior art figures 1-4 *could have* grooves formed as taught by groove 21 of Sutowski which would cooperate with complimentary surfaces on the inner surface of the hub portion as taught by 22 of hub 12 of Sutowski." Paper No. 15, page 2, italics added. The examiner finds that "at least figures 1 and 4 disclose a metal rim because the rim is peened to enable the rim to be secured to the bearing." *Id.*

The examiner has the initial burden under section 103 of presenting a *prima facie* case of obviousness, and can satisfy this burden by showing that the objective teachings in the prior art would have led one of skill in this art to combine the relevant teachings of the references. See *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598-99 (Fed. Cir. 1988). "The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. [Citations omitted]." *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

The object of Sutowski is to construct a wheel "taking advantage of the unique characteristics of nylon" (col. 1, ll. 30-33). To position the bearing unit within the central opening of the nylon wheel, Sutowski teaches using sufficient force to

move the bearing unit within the nylon part of the wheel, relying on the camming action of the sloping sides 23 and the "resilient yieldability" of the inner edge portion 22 of the web portion 12, such that the web portion 12 sufficiently yields under the applied force to permit interengagement of the outer race and the inner edge portion 22 of the nylon part to assume the position shown in Figure 1 (col. 2, l. 64-col. 3, l. 3). In Figure 1, "the web portion 12 has resiliently resumed its normal position after momentarily flexing and the inner radial edge portion 22 is now positioned within the groove 21 of the outer race" to secure the unit in place (col. 3, ll. 3-13). Accordingly, the interengagement of the bearing portion with the rim portion of Sutowski is clearly dependent on the resilient properties of the nylon rim, web and inner radial edge portion.

The examiner finds that the admitted prior art Figures 1 and 4 disclose a *metal* rim, as recited in claim 11 on appeal (a "metallic material"). However, the examiner has failed to establish that one of ordinary skill in this art would have applied the teachings of Sutowski regarding the interengagement of the bearing portion with the *nylon* rim, with the unique characteristics of the nylon, to the *metal* rim of the prior art Figures 1-4. The mere fact that the prior art *could* be modified

does not establish obviousness, unless the prior art suggested the desirability of the modification. See *In re Gordon, supra*. Appellant argues that the characteristics of metal and nylon rims are not the same (Brief, page 6), and we agree that the examiner has not established on this record that one of ordinary skill in this art would have been led to use the interengagement means taught by Sutowski for nylon portions with the metal rims of the admitted prior art Figures 1-4.

Additionally, we note that the examiner has not shown that the deformations of the surface of the second portion, as required by claim 11 on appeal, have been disclosed or suggested by the admitted prior art or Sutowski. Sutowski merely shows a molded inner radial edge portion 22 and web portion 12 (see Figure 3).

For the foregoing reasons, we determine that the examiner has not established a *prima facie* case of obviousness in view of the reference evidence. Therefore we need not consider appellant's submission of the Wilding Declaration dated Oct. 16, 2002, Paper No. 16 (Brief, page 4). See *In re Geiger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987). Accordingly, we can not sustain the examiner's rejection of

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claims 11-15 under 35 U.S.C. § 103(a) over appellant's Figures  
1-4 (admitted prior art) in view of Sutowski.

The decision of the examiner is reversed.

**REVERSED**

BRADLEY R. GARRIS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	
THOMAS A. WALTZ	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
	)	
CATHERINE TIMM	)	
Administrative Patent Judge	)	

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## **APPENDIX**

11. A wheel for an escalator step or a lift door, said wheel comprising a first portion comprising a ball or roller bearing having an inner portion and an outer portion which can rotate relative to one another, an outer surface of the outer portion of the first portion having at least one recess, and a second portion formed from a metallic material and providing a rim, said second portion surrounding the outer surface of the first portion and a surface of the second portion being deformed such that the resulting deformations protrude into said at least one recess provided on the outer surface of the first portion such that the second portion is secured to the first portion [sic, portion].